REMARKS

I. Rejections Under 35 U.S.C. §102(b)

The Examiner rejected claims 1-3, 5, 8-13, 15 and 18-22 under 35 U.S.C. 102(b) as being anticipated by Admitted Prior Art [hereinafter APA]. The Examiner argued that APA discloses an apparatus comprising a gauge (92) for measuring a gap between the baffle and the chamber wall (citing Figure 4 and page 13, lines 1-5 of Applicants' specification) in order to level the electrostatic chuck, which can be also translated into prevention of peeling or damaging said chamber wall. The Examiner argued that APA discloses an apparatus for use in various semiconductor fabrication operations. The Examiner further argued that APA discloses the use of dual rotate magnets (DRM) (citing Figure 4, # 10 and 11), a focus ring (20) and the electrostatic chuck having a horizontal or vertical movement.

The Applicants respectfully disagree with this assessment. Applicants' specification (see Paragraph 0034) indicates that one of the primary problems associated with prior art block diagram 90 stems from the fact that an associated chamber apparatus can be scratched by baffle plate 16 during movement of ESC 34 in a vertical direction (i.e., up and down) and from a transfer position to a process position (e.g., first position 98 to second position 100). Applicants refer to Applicants' specification at page 13, lines 5-16, which indicates that gauge 92 of FIG. 4 is inadequate for measuring such a gap movement, unlike the leveling mechanism 78 (i.e. leveling gauge) illustrated in FIG. 3. Applicants' specification indicates that the leveling mechanism 78 of FIG. 3 is configured in a manner which permits accurate measurement of the gap between a baffle plate, such as, for example, baffle plate 16 and a chamber wall. The configuration illustrated in FIG. 4 does not permit such measurement, which is the point of Applicants' invention.

Thus, the APA does not provide a leveling mechanism which permits accurate measurement of the gap between the baffle plate and the chamber wall in order to

prevent damage to the chamber wall by the baffle plate during a movement of the electrostatic chunk during a semiconductor fabrication operation. Such an accurate measurement is not provided by the APA, which is the reason Applicants have arrived at the solution disclosed and claimed in Applicants' specification. Applicants also note that in the configuration of FIG. 4, the gauge (92) is not located proximate to the electrostatic chuck at the second position of the electrostatic chuck. Applicants claims, particularly claims 21-22, indicate that the gauge is located proximate to the electrostatic chuck at the second position of the electrostatic chuck, which is a feature not taught or suggested by APA.

The Examiner has not explained how gauge (92) measures a gap between the baffle and the chamber wall in order to level the electrostatic chuck and ultimately permit accurate measurement of the gap between the baffle plate and the chamber wall in order to prevent damage to the chamber wall by the baffle plate during a movement of the electrostatic chunk during a semiconductor fabrication operation. Instead, the Examiner has taken APA out of context and has in effect produced the words of the claims, without their meaning or context. How does the gauge (92) of APA indicate a leveling mechanism which permits accurate measurement of the gap between the baffle plate and the chamber wall in order to prevent damage to the chamber wall by the baffle plate during a movement of the electrostatic chunk during a semiconductor fabrication operation? The Examiner has not explained why this is so. In fact, the opposite is the case.

The APA does not disclose a leveling mechanism which permits accurate measurement of the gap between the baffle plate and the chamber wall in order to prevent damage to the chamber wall by the baffle plate during a movement of the electrostatic chunk during a semiconductor fabrication operation. In fact, Applicants' specification indicates (see paragraph 0033) that, prior art gauge 92 cannot properly measure a gap formed between first position 98 and second

position 100, which can result in damage to particular parts and elements associated with ESC 34 during a semiconductor processing or fabrication operation.

With respect to the preamble of the claim, the Examiner argued that the preamble does not provide enough patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending to completeness upon the introductory clause. The Examiner also argued that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Applicants submit that the aforementioned statements are irrelevant in light of the fact that APA does not disclose an apparatus comprising a gauge for measuring a gap between the baffle and the chamber wall in order to level the electrostatic chuck, which can be also translated into prevention of peeling or damaging said chamber wall.

Regarding the Examiner's argument that the APA discloses the use of dual rotate magnets (DRM) (citing Figure 4, # 10 and 11), a focus ring (20) and the electrostatic chuck having a horizontal or vertical movement, the Applicants submit that the any use of DRM and/or the focus ring by APA does not anticipate or suggest the use of DRM and a focus ring as taught by Applicants claims because such claims depend from claims, which are not anticipated by the APA, as indicated above. Therefore, the Applicants respectfully request withdrawal of the rejection to any claims under 35 U.S.C. 102(b), which teach DRM and/or a focus ring.

Applicants also note that the APA does not teach or suggest that the gauge is adapted for use in preventing polymer peeling of the chamber wall, which is indicated in Applicants claims 5 and 15. The Examiner has not cited any sections of APA and explained how the APA teaches that the APA gauge is adapted for use in

preventing polymer peeling of the chamber wall. Therefore, because the Examiner has not provided such an explanation or reasoning and also pointed to how the APA provides the features taught by claims 5 and 15, the Applicants submit that the rejection to claims 5 and 15 under 35 U.S.C. 102(b) as being anticipated by the APA must be withdrawn. Applicants therefore request withdrawal of the rejection to claims 5 and 15 under 35 U.S.C. 102(b).

Regarding claims 11-13 and 15, the Examiner argued that the method as stated in claims 11-13 and 15 can be met by the regular operation of the apparatus and system disclosed by APA. The Applicants respectfully disagree with this assessment for the reasons provided above, which apply equally to the rejection to claims 11-13 and 15. Based on the foregoing, the Applicants submit that the rejection to claims 1-3, 5, 8-13, 15 and 18-22 under 35 U.S.C. 102(b) have been traversed. The Applicants therefore respectfully request that the aforementioned rejection be withdrawn.

II. Rejections Under 35 U.S.C. §103

In the above-captioned Office Action, the Examiner rejected claims 4 and 14 as being unpatentable over APA. The Examiner admitted that the APA does not disclose the particular orientation of the gap gauge, i.e., horizontal, as stated in claim 4. The Examiner also admitted that the APA does not disclose a leveling gauge as stated in claim 6.

With respect to claim 4, the Examiner argued that the APA discloses a gap gauge (92), which as best understood by the Examiner, can be considered a horizontal gap gauge due to its orientation. However, the Examiner stated, changing the location of the gap gauge from the location shown by the APA to a location measuring the horizontal gap, absent any criticality, is only considered to be an obvious modification of the APA apparatus that a person having ordinary skill in the art at the time the invention was made would be able to provide using

routine experimentation since the courts have held that there is no invention in shifting the position if the operation of the device would not be thereby modified. The Applicants respectfully disagree with this assessment.

In order to maintain a rejection to a claim under 35 U.S.C. §103(a), the Examiner must provide reasoning regarding how the "obvious modification" overcomes the problems inherent with the cited reference utilized as a basis for rejecting the claims at issue. In the present case, the Examiner has cited the APA with respect to the rejection to claim 4. Claim 4 is dependent upon claim 1. Thus, claim 4 incorporates all of the features of claim 1. As explained above with respect to the rejections to Applicants' claims under 35 U.S.C. 102, the APA suffers from inherent problems, which are solved by the invention taught by Applicants' claims.

Applicants' specification (see Paragraph 0034) indicates that one of the primary problems associated with prior art block diagram 90 (i.e., the APA) stems from the fact that an associated chamber apparatus can be scratched by baffle plate 16 during movement of ESC 34 in a vertical direction (i.e., up and down) and from a transfer position to a process position (e.g., first position 98 to second position 100). Applicants refer to Applicants' specification at page 13, lines 5-16, which indicates that gauge 92 of FIG. 4 is inadequate for measuring such a gap movement, unlike the leveling mechanism 78 (i.e. leveling gauge) illustrated in FIG. 3. Applicants' specification indicates that the leveling mechanism 78 of FIG. 3 is configured in a manner which permits accurate measurement of the gap between a baffle plate, such as, for example, baffle plate 16 and a chamber wall. The configuration illustrated in FIG. 4 does not permit such measurement, which is the one of the points of Applicants' inventive solution.

Thus, the APA does not provide a leveling mechanism, which permits accurate measurement of the gap between the baffle plate and the chamber wall in order to prevent damage to the chamber wall by the baffle plate during a

movement of the electrostatic chunk during a semiconductor fabrication operation. Such an accurate measurement is not provided by the APA, which is the reason Applicants have arrived at the solution disclosed and claimed by Applicants claims 4 and 1. The horizontal features of claim 4, combined with the features of claim 1, therefore overcome the problems inherent with the APA, and are not obvious modifications.

Claim 4, which is dependent upon claim 1, indicates that the gauge comprises a horizontal gap gauge. The APA does not teach or suggest a gauge apparatus for use in a semiconductor fabrication system, wherein the apparatus comprises: an electrostatic chuck associated with a semiconductor fabrication system, wherein the electrostatic is moveable from a first position to a second position; and a gauge for measuring a gap between a baffle plate and a chamber wall, and preventing damage to the chamber wall by the baffle plate during a movement of the electrostatic chunk during a semiconductor fabrication operation of the semiconductor fabrication system, wherein the gauge is located proximate to the electrostatic chuck at the second position of the electrostatic chuck.

The APA discloses a gauge 92, which is not a horizontal gap gauge but rather one that is vertically positioned. Additionally, as explained in Applicants' specification, gauge 92 cannot properly measure a gap formed between first position 98 and second position 100, which can result in damage to parts and elements associated with ESC 34 during semiconductor processing or fabrication operations.

Therefore, the Examiner is incorrect in asserting that APA suggests or teaches Applicants' claim 4, when in fact, APA is plagued by a number of problems, which have just been enumerated and which are overcome by Applicants' invention. Additionally, the Examiner has not explained why one skilled in the art would have

been motivated to have modified the APA to derive all of the features of Applicants' claim 4, including all of the features of claim 1, upon which claim 4 depends.

With respect to claim 14, the Examiner argued that the method as stated in claim 14 can be met by regular operation of the apparatus and system disclosed by the APA. The Applicants respectfully disagree with this assessment for the same reasons provided above with respect to claim 4, which also apply equally to the rejection to claim 14. The Applicants thus believe that the rejection to claims 4 and 14 as being unpatentable over the APA has been traversed. Applicants therefore request withdrawal of the rejection to claims 4 and 14 under 35 U.S.C. §103.

The Examiner further rejected claims 6 and 16 under 35 U.S.C. 103(a) as being unpatentable over the APA in view of Hunter (U.S. Patent No. 6,468,816). The Examiner argued that the APA discloses an apparatus as stated in paragraph 4 above. The Examiner admitted that the APA does not disclose a leveling gauge as stated in claims 6 and 16. The Examiner argued, however, that Hunter discloses a processing system having a processing chamber (12) having a bubble level (16) for determining the inclination of the blade (18) in order to avoid misalignment during a process. Therefore, the Examiner argued, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add a bubble level/leveling gauge as taught by Hunter in the apparatus disclosed by APA in order to correct from damages due to expansion/shrinkage on the surface to be leveled that may result in malfunction of the process overtime. With respect to the method of claim 16, the Examiner argued that the method as stated in claim 16 can be met by regular operation of the apparatus and system disclosed by APA. The Applicants respectfully disagree with this assessment.

Both APA and Hunter do *not* prevent damage to a chamber wall by a baffle plate in a semiconductor fabrication system during a semiconductor fabrication

operation. Hunter does not indicate the use of a baffle, and it is not clear that configuration of Hunter will prevent damage to a chamber wall by a baffle plate, because the configuration of Hunter does not suggest or teach the use of a baffle. As explained previously, the APA also is plagued by several problems, which result in damage to the chamber apparatus by the baffle plate 16 during movement of the ESC 34 in a vertical direction.

With respect to the method as stated in claim 16, the Examiner argued that the method in claim 16 can be met by the regular operation of the apparatus and system disclosed by the APA. Applicants disagree with this assessment because, as explained above, neither the APA and/or Hunter teach or suggest an apparatus or method which prevents damage to chamber walls by a baffle plate.

The Applicants remind the Examiner that the language of the references (i.e., APA and/or Hunter) may not taken out of context and combined without motivation, in effect producing the words of the claims (and sometimes, not even the words or concepts of the claims), without their meaning or context. The resultant combination would not yield the invention as claimed. The claims are rejected under 35 U.S.C. §103 and no showing has been made to provide the motivation as to why one of skill in the art would be motivated to make such a combination, and further fails to provide the teachings necessary to fill the gaps in these references in order to yield the invention as claimed.

The rejections under 35 U.S.C. §103 have provided no more motivation than to simply point out the individual words of the Applicant's claims among the references, but without the reason and result as provided in the Applicant's claims and specification, and without reason as to why and how the references could provide the Applicant's invention as claimed. Hindsight cannot be the basis for motivation, which is not sufficient to meet the burden of sustaining a 35 U.S.C. §103 rejection.

Thus, the claims of the present invention are not taught or suggested by Hunter and/or APA. Combining these references fails to teach or yield the invention as claimed. The combination of these references fails to teach or suggest all the elements of the claims. Further, one of skill in the art would not be motivated to make such a combination. Therefore, the present invention is not obvious in light of any combination of Hunter and/or APA. Withdrawal of the §103(a) rejections to claims 4, 14 and 6, 16 as being unpatentable over Hunter and/or APA is respectfully requested.

III. Conclusion

In view of the foregoing discussion, Applicants have responded to each and every rejection of the Official Action, and respectfully request that a timely Notice of Allowance be issued. Applicants have clarified the structural distinctions of the present invention. Applicants respectfully submit that the foregoing discussion does not present new issues for consideration and that no new search is necessitated. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. §102 and §103, and further examination of the present application.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned representative to conduct an interview in an effort to expedite prosecution in connection with the present application.

Respectfully submitted,

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